

REMARKS

The Office Action dated May 3, 2007 has been received and carefully noted. The above amendments to the specification and claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 1-14 were pending. By this Response, claims 1, 3, 4, and 12-14 have been amended to improve clarity of the features recited therein, and new claims 15-33 have been added to further complete the scope of protection to which Applicants are entitled. No new matter has been added, and approval and entry of the amendments are respectfully requested.

On page 2 of the Office Action, the specification was objected to as containing informalities. In response, Applicants have amended the specification, as shown above, to correct a minor typographical error noted by the Office Action. Accordingly, approval and entry of the amendment to the specification are respectfully requested.

Claims 1-14 were rejected under 35 U.S.C. §102(e) as being anticipated by Wang (U.S. Patent Application Publication No. 2002/0131395 – herein after Wang). The Office Action contended that Wang describe all of the features recited in the rejected claims. As will be discussed below, each of the presently pending claims recite subject matter which is neither disclosed nor suggested in the cited prior art.

Independent claim 1, upon which claims 2-13 are dependent, is directed to a communication system that includes a multimedia network having an information storage entity configured to store user information and call state control function entities, an

entity that is external to the multimedia network and configured to subscribe to the multimedia network for notifications regarding events that associate with at least one other entity of the communication system, the configuration being such that subscription messages from the external entity are routed to at least one call state control function entity based on information stored in said information storage entity. The at least one call state control function entity is provided with a storage configured to store information received in said subscription messages, and the at least one call state control function entity sends a notification in response to an event defined by said information stored in the store of the call state control function entity.

Independent claim 14, upon which claims 15-26 are dependent, is directed to a method that includes sending notifications in a communication system, subscribing by an entity that is external to a multimedia network of the communications system for notifications regarding events associated with at least one other entity, routing of subscription messages from the external entity to at least one of a plurality of call state control function entities of the multimedia network based on information stored in an information storage entity of the multimedia network. The method further includes storing in a store associated with the at least one call state control function entity information received in the subscription messages, and sending a notification by the call state control function in response to an event defined by said information stored in said store associated with the at least one call state control function entity.

Independent claim 27 is directed to an entity in a communications system that is configured to: receive a subscription message from a further entity, communicate with an information storage entity in a multimedia network, and to route the subscription message to at least one call state control function entity in the multimedia network based on information stored in the information storage entity.

Independent claim 28 is directed to an information storage entity in a multimedia network in a communications system. The information storage entity configured to: receive a query from a further entity, wherein the query comprising information associated with a subscription message, and respond to the query, with a response having information associated with at least one call state control function entity in the multimedia network.

Independent claim 29 is directed to an information storage entity in a multimedia network in a communications system. The information storage entity configured to: receive a subscription message from a further entity; and to route said subscription message to at least one call state control function entity in the multimedia network based on information stored in the information storage entity.

Independent claims 30 to 33 are means-plus-function claims that parallel non-means-plus-function independent claims 1 and 27-29, respectively.

Applicants respectfully submit that Wang fails to teach, disclose, or suggest all of the recitations in the pending claims.

An embodiment of the present invention is directed an improved technique for sending notifications in a communication system comprising a multimedia network. An external entity, such as a presence server, sends a subscription message to the multimedia network. This subscription message is received at a call state control function which queries an HSS for a list of S-CSCF's to which the subscriber message should be sent. The returned list is then used to route the subscribed message to the correct S-CSCF.

This technique enables a single subscription message to be forwarded onto multiple S-CSCF's and to relate to multiple users. This technique further enables the proprietor of the multimedia network to avoid having to inform the external entity of the identity of the S-CSCF. Thus, the composition of proprietary networks can be advantageously maintained as a secret.

In prior art, by contrast, the external entity is required to know the identity of the S-CSCF and all send it subscription message directly to this entity. Consequently one message has to be sent for each S-CSCF or user. Additionally, the external entity is required to know the identity of the S-CSCF in order to correctly send the request.

Applicants respectfully assert that Wang generally describes a communication system in line with prior art. In particular, Applicants respectfully direct the Examiner's attention to, e.g., Figs. 12 and 16 and their associated description shown in paragraphs 79-80 and 111-112 of Wang as support for Applicants' assertion.

More specifically, with reference to paragraph 80 of Wang, it is stated:

[0080] User B subscribes to User A's presence status by SUBSCRIBE 1202 User A's static IP address or his URI. The subscription is done by contacting User A's home presence server, which is an Application Server (may or may not be SIP enabled). It is assumed that User A was not online yet. Otherwise the Application Server would send notification message right away to User B. When User A powers on, the network (SGSN) intercepts the event and sends a SIP REGISTER 1204 request to the SIP Application Server (visited presence server), which in turn forwards the information to User A's home presence server 1206. The subscription list is checked there and a notification message 1210 is sent to User B. An Instant Message 1208 from User B to User A follows. User B may choose to use other means to contact User A, such as SMS.

Similarly, in paragraph 112 of Wang, it is stated:

[0112] At step 1702, the User B sends a SIP Subscribe request to the SIP AS 216 to subscribe to the presence status of User A. At step 1704, User A powers on his mobile station and sends an Attach request to the SGSN 208. At step 1706, the Gb/Iu handler 1402 sends the Attach_Accept message to the MM 1404. The MM 1404 checks the SGSN internal SIP_AS flag and scans the subscriber profile and sends the Attach accept message to the User A at step 1708. At step 1710, a Start_SIP_UA message is sent to the SIP UA 214. At step 1712, a SIP Register message is sent to the SIP AS 216 that the MS A is successfully attached. At step 1714, the SIP AS 216 responds with an OK message. At step 1716, the SIP AS 216 checks if anyone is to be notified of the presence of MS A, and sends a notify message to User B. Finally, at step 1718, User B starts an Instant Message Application, which triggers a Network Requested PDP context activation. In this case User A is assumed to have subscribed to a static PDP address.

In the above-mentioned exemplary paragraphs, it is clear that the User B has the knowledge of the identity of User A's application server (AS). Hence, Applicants respectfully assert that there is no motivation or suggestion in Wang for an information

storage entity configured to store user information and call state control function entities, an entity that is external to the multimedia network and configured to subscribe to the multimedia network for notifications regarding events that associate with at least one other entity of the communication system, the configuration being such that subscription messages from the external entity are routed to at least one call state control function entity based on information stored in said information storage entity, wherein at least one call state control function entity is provided with a storage configured to store information received in said subscription messages, and the at least one call state control function entity sends a notification in response to an event defined by said information stored in the store of the call state control function entity, as recited in claim 1, for example.

In other words, the system described by Wang cannot achieve the aforementioned advantages that the presently claimed invention has. That is Wang cannot enable a single subscription message to be forwarded onto multiple S-CSCF's and to relate to multiple users. Further, Wang cannot enable the proprietor of the multimedia network to avoid having to inform the external entity of the identity of the S-CSCF. Hence, Wang cannot provide a system wherein the composition of proprietary networks can be advantageously maintained as a secret.

In the rejection, the Office Action referred in particular to paragraph [0007] of Wang and contended that the paragraph suggests that the system may support both SIP Application Server and CAMEL Service Environment. The Office Action then alleged

that the choice of which to use may be based upon subscription information stored in, for example, an HLR. However, Applicants respectfully disagree with the allegation for the following reasons:

Firstly, the information stored does not define a particular call state control function entity, rather the protocol to be used.

Secondly, in light of the description found in paragraph 112 of Wang, it is clear that no consideration was given to routing the message to a S-CSCF based upon stored information, since the paragraph describes the direct sending of an SIP Subscription request to the Application Server.

In view of the above, Applicants respectfully assert that the Office Action's analysis and allegation that such the feature is taught in Wang is only possible with hindsight knowledge of the present invention.

As discussed above, Wang fails to teach, disclose, or suggest to a communication system that includes a multimedia network having an information storage entity configured to store user information and call state control function entities, an entity that is external to the multimedia network and configured to subscribe to the multimedia network for notifications regarding events that associate with at least one other entity of the communication system, the configuration being such that subscription messages from the external entity are routed to at least one call state control function entity based on information stored in said information storage entity, wherein the at least one call state control function entity is provided with a storage configured to store information received

in said subscription messages, and the at least one call state control function entity sends a notification in response to an event defined by said information stored in the store of the call state control function entity, as recited in the pending independent claim 1, for example.

Applicants respectfully assert that Wang also fails to describe a method that includes sending notifications in a communication system, subscribing by an entity that is external to a multimedia network of the communications system for notifications regarding events associated with at least one other entity, routing of subscription messages from the external entity to at least one of a plurality of call state control function entities of the multimedia network based on information stored in an information storage entity of the multimedia network, storing in a store associated with the at least one call state control function entity information received in the subscription messages, and sending a notification by the call state control function in response to an event defined by said information stored in said store associated with the at least one call state control function entity, as recited in independent claim 14, for example.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the pending obviousness rejection over 1-14.

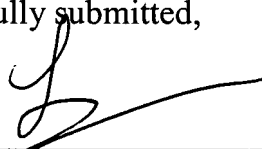
The arguments set forth above in relation to the rejection of independent claims 1 and 14 are also applicable to their respective dependent claims, as well as to newly added claims 15-33.

In view of the above, Applicants respectfully submit that each of the claims 1-33 recites subject matter which neither disclosed nor suggested in the cited reference to Wang. It is therefore respectfully requested that these pending rejections be withdrawn, and this application pass to issue with the allowance of pending claims 1-33.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, Applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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Enclosures: Additional Claim Fee Transmittal; Check No. 16836